



WINTERING BEES SUCCESSFULLY PROBLEM OF MAN WITH BUT A FEW HIVES

THE COUNTRY CALENDAR

A LITTLE CARE WITH HOUSE PLANTS RESULTS IN WINDOW FULL OF BLOOMS

Practical Hints About Things to Do at This Season in Garden and Greenhouse, the Orchard and the Poultry Yard.

Now, a good share of the best education that one ever receives is secured through first-hand contact with nature—plants, animals, hills, valleys, rocks, streams, and overhead. These things are a material aid in the higher book studies without an extensive knowledge of natural things. A child of poetry can be rightly understood and enjoyed only by those who have spent years in the country.

Propagate roses by hardwood cuttings. Take cuttings three or four inches long, tie them into bundles and place in damp sand. They will be ready to plant out next spring.

Roupe often follows if the chickens are allowed to trail through the wet grass and underbrush early in the morning. Keep them out of the house and yard until the sun is well up.

On dull, dismal days it is a good plan to scatter a few handfuls of millet in the litter. The fowls are very fond of this grain, and will scratch it out with their feet to find it. And they need to be kept busy on such days.

It should be remembered that the days are very short, for which reason feeding should be done promptly. It is particularly necessary that the fowls should be fed early in the morning, so that they may have their crops of whole grain, as many hours

will elapse before daylight brings another feeding hour.

It is a good plan to suspend a cabbage by a string from time to time in the poultry house, but not so high that the fowls have to jump for it. Many poultrymen hang the cabbage heads too high, believing that the exercise that the fowls are forced to take is good for them. As a matter of fact, however, there is danger of rupturing the partly formed eggs.

A fowl in the fall that shows that it has been doing something the previous year is one to select to keep in your flock. A fowl with pale colored legs and worn toenails was a good layer last year, and the chances are that she will be a profitable hen for at least another year. Keep her not only as a layer but as a breeder.

It is highly important that the horses should be thoroughly rubbed down when they come into the stable wet with rain or perspiration. It is not good judgment or economy to allow them to dry off by means of body heat.

Feed carrots to the horses with a liberal hand during the winter months. They are nutritious and greatly relished by the animals. Also they help the digestion and improve the appearance of the coat. It is possible to cut the allowance of oats for half to two-thirds of the usual amount with an equal bulk of carrots.

HOW ONE MAN CAN OPERATE HUNDRED ACRE FARM ALONE

A system of farm management by which one man, with a little occasional help from outside can do all the work of a 100-acre farm, is recommended by the United States Department of Agriculture for those farmers in the North-east States who are seriously handicapped by the scarcity of labor and whose soil is suited to corn. Any kind of hired labor on the farm has now become so costly and efficient labor so difficult to obtain, especially the extra labor required at harvest time, that in many sections of the country, in the opinion of experts, this factor will compel a radical reorganization in farming practice, unless conditions change in the near future.

In the corn-belt States a number of farmers have already made some progress toward solving the labor problem by compelling hogs to do much of the work hitherto performed by hired hands. The practice of "hogging off" crops has long been a familiar one, but it is only recently that this labor-saving device has been developed in a scientific way. Under the system discussed in detail in Farmers' Bulletin No. 614, of the U. S. Department of Agriculture, the Corn-Belt System of Farming Which Saves Harvest Labor by Hogging Off Crops, hogs perform a large part of the harvesting and the corn is so arranged that one man can do all the plowing, planting and cultivating necessary. With such a method the farmer can produce a large crop of corn on a small acreage, and the extra labor needed to shred his corn for bedding. In this way it has been estimated that on a farm of 100 acres the farmer will only have to pay wages for about ten days' hired labor during the harvest.

Reduced to its simplest terms, the system consists of a four or five year rotation of corn, corn, rye and a mixture of clover and timothy one or two years.

For the purpose of illustration the following diagram of a farm laid out on a five-year rotation, which is the

better where he brings a fair price, will be found useful:

Plan of a farm run on a five-year rotation. It is desirable that the five fields included in this scheme should be approximately the same size. Assuming that they are each twenty acres, one man should have comparatively little refrigerator work, and a greater part of the year in doing all the work that they require and in addition caring for the live stock. In field No. 1 the first year corn is grown and hogged off as soon as it is ripe. This is generally from September 1 to September 15. When the corn is cultivated for the last time, it is usually desirable to sow soy beans or rape, in order that the hogs may have pasturage while gathering the corn. Also because such crop supplies valuable humus, which can be turned back into the soil. In the following year the field is devoted to corn and one-year corn and becomes field No. 2 in the illustration.

Field No. 2, as we have seen, is devoted to corn which is not hogged off, but harvested in hand. Here rye is sown in the fall. Under favorable conditions this can be done while the corn is still standing, but if necessary it is not too late after the corn has been cut and shocked. Rye may be sown much later than wheat and this is one of its great advantages in a rotation, such as is now being described.

Field No. 3 is devoted to clover throughout the entire season. In the spring it is pastured by the hogs as long as it is palatable, affording excellent pasturage, especially for young hogs and brood sows. When the rye becomes tough and the hogs cease to relish it, they should be removed and not returned to the field until the clover after the rye has ripened. They should then be allowed to gather the entire field for a considerable period of time, so that the clover may be well mixed with the soil.

Field No. 4 is devoted entirely to water or water and ice to cool them is undesirable, and packing in with a heavy layer of straw on top of the barrel is a continuation of an unreliable and often very disastrous method.

Sixth—Pack the chilled birds in standard boxes—twelve to the box or in small kegs if they are not to be packed in a box. Each bird in the package is an exact match in quality, size, color and perfection of dressing for every other bird. This is the best of handling during transportation. Dressed poultry should be shipped in car lots. If you cannot get the minimum quantity for

hog pasture. When clover and timothy are planted together, the hogs graze principally on the clover and leave most of the timothy to be cut for hay. In the five-year rotation, however, field No. 5 is depended upon to furnish the principal supply of hay for the hogs and cows. There should be some surplus, and this, of course, can be sold. Late in the fall the field is plowed for first-year corn, and in the following spring it takes its place in the rotation as field No. 1.

The great merit of this system of crop management is that there is no such thing as a "dead" year. The land is so distributed throughout the entire year that the maximum acreage is secured. By plowing one field for corn in the fall, one man can do the spring work to get the corn in, cultivate it, and produce a crop without assistance.

The next operation is putting up the hay, and here it is inevitable that outside labor be called in. Compared with other systems of farm management, however, the amount of outside help required is very small. Since the hogs harvest the rye, there is practically no field work to be done after the hay is in until early in September, when one field of corn must be cut and one field of rye sown. This period of about one month in length is a thrashing time for the farmer's neighbors, and he and his horses should find it possible to do work for them which will only cost him a few extra help is needed to shred his corn for bedding. In this way it has been estimated that on a farm of 100 acres the farmer will only have to pay wages for about ten days' hired labor during the harvest.

On such a farm, as has already been said, hogs furnish the principal labor, and the farmer can have his corn as early as possible in the spring, and there the fall shoots and spring

pigs remain as long as the pasturage is tender. When the spring pigs are from six to eight weeks old they are weaned and the brood sows taken to the barn where they can be bred for fall litters.

Hogs Do Harvesting. By the first part of May it is probable that the rye no longer actively grows, and the hogs are then turned into field No. 4, devoted to first-year clover and timothy. There they remain, with the addition of a reasonably liberal corn ration, until the middle of July, or two weeks after the rye has ripened, when they are turned back into the rye field and allowed to hog it all season without other feed. Roughly speaking, it may be said that if the rye yields seventeen bushels to the acre, six hundred hogs will harvest an acre in six weeks. Thus, by the time the rye is harvested the corn is ready to be cut, and the hogs are turned into field No. 1. Here they can be kept until all the corn is hogged off, which will be approximately November 1, if none of the hogs are sold until the entire crop is gathered. In this way, with practically no labor and very little attention, the entire harvest is carried out with a minimum of expense.

As for the cash income per acre from such a system, it appears that the method of hogging down rye ultimately brings the same returns as cutting, threshing and selling the crop, but in addition to the cash returns, the hogs build up the soil and save the cost of labor. This, it must be repeated, is the real purpose of such a system. With labor already scarce, and becoming scarcer every year, some substitute must be found, and the hogs are the best. The Department of Agriculture, the system which has just been described seems to be sound and practical, and a considerable number of the farms in those sections to which it is adapted.

Get together! In this emergency the good of one is the good of all. Circulars 61, 64 and 70, Bureau of Chemistry, and yearbook article No. 591, all dealing with the handling of dressed poultry, will be sent on application to the Department of Agriculture as long as the supply for distribution lasts.

Get together! In this emergency the good of one is the good of all. Circulars 61, 64 and 70, Bureau of Chemistry, and yearbook article No. 591, all dealing with the handling of dressed poultry, will be sent on application to the Department of Agriculture as long as the supply for distribution lasts.

Get together! In this emergency the good of one is the good of all. Circulars 61, 64 and 70, Bureau of Chemistry, and yearbook article No. 591, all dealing with the handling of dressed poultry, will be sent on application to the Department of Agriculture as long as the supply for distribution lasts.

Get together! In this emergency the good of one is the good of all. Circulars 61, 64 and 70, Bureau of Chemistry, and yearbook article No. 591, all dealing with the handling of dressed poultry, will be sent on application to the Department of Agriculture as long as the supply for distribution lasts.

Get together! In this emergency the good of one is the good of all. Circulars 61, 64 and 70, Bureau of Chemistry, and yearbook article No. 591, all dealing with the handling of dressed poultry, will be sent on application to the Department of Agriculture as long as the supply for distribution lasts.

Get together! In this emergency the good of one is the good of all. Circulars 61, 64 and 70, Bureau of Chemistry, and yearbook article No. 591, all dealing with the handling of dressed poultry, will be sent on application to the Department of Agriculture as long as the supply for distribution lasts.



In this house window garden, a very simple shelf has been built over the radiator and has worked out most successfully. Many varieties of plants are raised with little trouble.

The care of house plants in winter is never a burden if rightly undertaken but the housewife should first make up her mind to be systematic. Plants watered three times a day for the first week and once in three weeks later in the season will never prove a delight. Colons, begonias and similar varieties should be watered daily except during extremely cold weather. Only in two or three days is often enough to water palms, geraniums, roses, etc.

Begonias, fuchsias, ice plant, etc., do well in the back of the window farthest from the light, while roses and coleus need all the sunshine possible. Instead of spraying the

leaves for insects, powdering the soil, etc., try putting a tall stand in the center of the room and setting the plants under it once in three or four weeks. In the center of the circle of plants set a deep vessel, put in a little twist of paper, sprinkle it with tobacco leaves and apply a match. When the tobacco begins to burn the careful not to have too much of it throw an old quilt over the top of the stand, thus confining the smoke. The result will be death to all animal life on stalks or leaves of carabid acid. Repeat the plant, throw away the old soil and be sure that you will have no more trouble with the white worms.

Many remedies have been given for the small white worm that infests the earth about plants, but my experience has been that all will fail. The surest plan is to fill a baking dish or old basin with fresh earth from the supply which every plant lover places in the cellar in the autumn for the filling of pots for new plants. When filled set it in the oven and bake for at least six hours, remove and set out of doors until thoroughly cool. Take the plants from the pots, shake every particle of earth from the roots, set them in a basin of water to which has been added three or four drops of carabid acid. Repeat the plant, throw away the old soil and be sure that you will have no more trouble with the white worms.

Success with cold frames in the fall depends on getting your plants well started before the frosts come. A good plan is to build your framework, and a good idea would be to have twelve feet. This would require four frame covered with glass.

If you want to have vegetables all through the winter you must replace the cloth frames with glass about November 1, and by this means some of the harder plants, like radishes, beets, string beans and onions, can be had practically all winter, though it will probably be well for winter use to bank your frame all around with fresh horse manure, with from a hole about eight inches square and turn your cold frame into a hot bed.

Among the flowers, violets, pansies, English daisies and primroses will grow well during the winter in a cold cloth frame to cover it, and the total expense should not exceed \$5 for materials. Inside this inclosure can be planted any late-season vegetables that you want to raise. If the sun is particularly hot, put the cover frames on every night, taking them off in the morning, but when the weather gets still colder leave these cover frames on all the time. You will be surprised at the excellent crop of late vegetables you will have when all your neighbors' gardens are desolate.

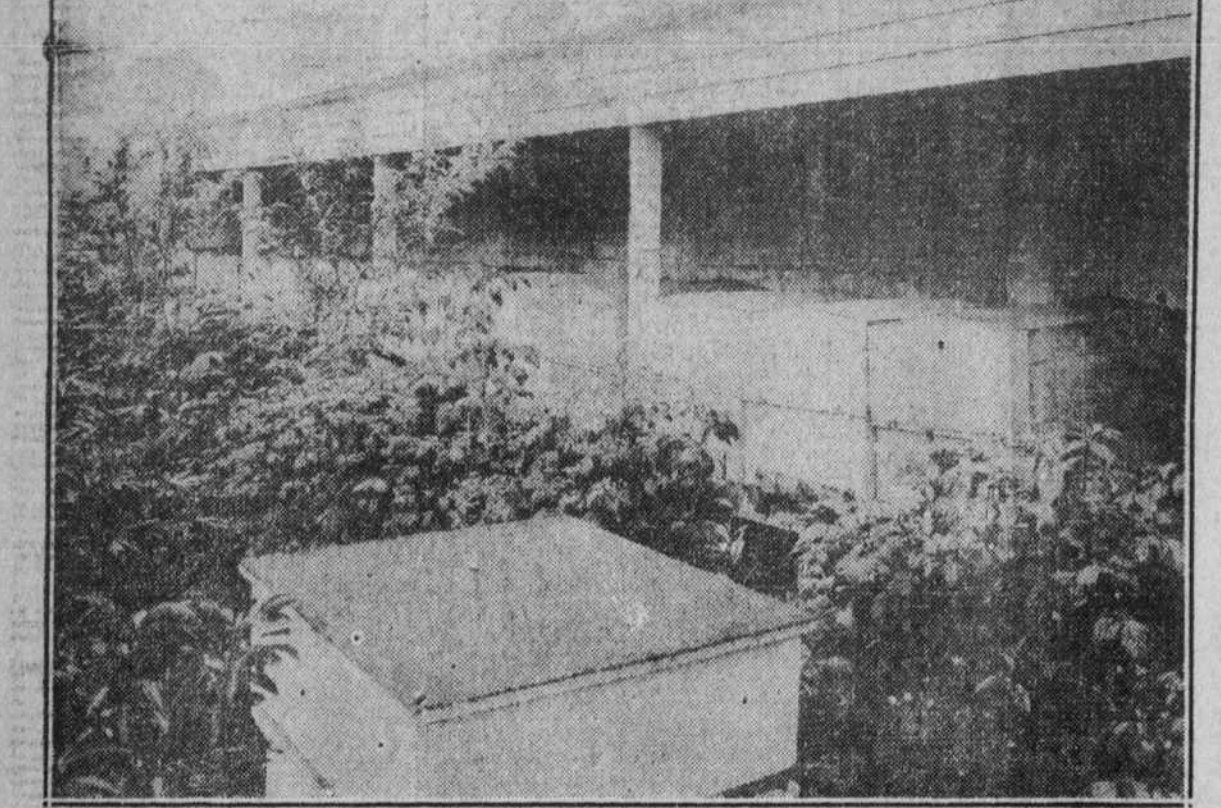
Get things in shape for a bed of winter onions. The yellow multiplier, or potato onion, is one of the best for fall planting. It should be placed rather deeply in the row, as there is some chance in some soils of "spewing" or "heaving" during the changes of freezing and thawing. Set the large onions about a foot apart in the row. Set the smaller bulbs about eight inches apart in the row, and have the rows of each size of bulbs about twenty inches apart. This variety of onions requires a little more space in which to develop, as there is quite a large increase by multiplying in the hills. And there is no crop that will repay the labor or none that will respond to liberal fertilizing more quickly than the yellow multiplier onion.

Renovate the Lawn. October is the month in which we should renovate the lawn. The best spots, if any, should be loosened up with a spading fork or some similar implement, and the seed of blue-grass

or a combination of lawn grass seed scattered over these places.

For spring planting of peach trees and other trees that are to be planted next spring holes should be dug this fall. Throw out the earth from a hole about eighteen inches square and two feet deep. Place the top soil on one side and that from near the bottom of the hole on the other side of the hole, so when setting in the trees next spring the top or richest soil will be placed around the roots as the trees are put in place.

Do not permit any field to lie bare during the winter; sow something, be it rye, winter oats, wheat, winter vetch, or something that will be a protection to the ground during the winter and, when plowed under in the spring, will afford some humus content to the soil.



Here is a successful shed built in a back yard that keeps the bee hives under cover and at the same time leaves plenty of open space.

Every fall the farmer with a few bees is confronted with the problem of wintering them. Winter losses are both expensive and frequent and few have found a preventative to losses. There are several things necessary to good wintering. Plenty of good honey for the bees to winter on is perhaps the most important. Where colonies are light they should be fed in the fall, after the flowers have ceased bearing nectar. For the farmer who hasn't expensive feeders, put on a sugar punch a few holes in the top of a tin can and after filling it with a syrup made from two parts water to one of sugar, invert the can, inside the super above the frames. This will answer all practical purposes. Don't make the holes too big or the syrup will run out faster than the bees can care for it and perhaps cause rabbling. Warm the water in making

the syrup and they'll take it faster. A good way to learn if a colony has enough strength to winter is to lift it. Find the heaviest one and have them all about alike. Most colonies weighing forty-five to fifty pounds will winter all right as far as stores go. Where the colonies are very light it is well to shake two or three of them into one hive for winter, smoking all well first.

Bees do not need to be kept warm in winter. Give them plenty of ventilation and good stores and they will keep warm enough. If the entrances to the hives are big, put blocks of wood in front of them to make them smaller. This will enable the bees to keep the hives warmer and exclude mice, which eat comb.

Keeping the bees dry is as important as anything. A shed cheaply constructed will answer the purpose

well. The bees can be moved forward in spring, or may prefer to let them have the protection all summer, as it keeps off the hot sun and keeps out cold winds in spring and fall.

Face the shed south. Set the hives on sticks of wood so they will be off the ground. Put on sunners and in them put gunny sacks filled with straw. Set the hives closely together, pack between with straw or leaves and get some corn stalks from the shocks and put to the three sides of them, leaving the south open. Bees can be wintered in your cellar, if you can keep the temperature about even, not letting it get above 50 or 55 degrees. Have them off the floor and give plenty of fresh air.

Bees do not need to be kept warm in winter. Give them plenty of ventilation and good stores and they will keep warm enough. If the entrances to the hives are big, put blocks of wood in front of them to make them smaller. This will enable the bees to keep the hives warmer and exclude mice, which eat comb.

Keeping the bees dry is as important as anything. A shed cheaply constructed will answer the purpose

ASK "THE QUESTION BOX"

What You Want to Know About Gardening, Poultry and Country Problems Answered by Experts.

This service costs you nothing. The only requisite for a full and complete answer is to state your problem clearly, to write only on one side of the paper, and to sign your name and give your address. Initials only will be used in answering queries. If your question relates to diseased plants, describe fully and also send us a piece of the plant (stem and leaves) if possible. Address "Home and Garden Question Box," The Evening Star, Newark, N. J.

To Kill Moss in Meadows and Pastures. What is the best way to kill the moss that grows in meadows and pastures? Elizabeth.

Moss on the surface of fields indicates that the soil is acid. Apply any carrier in the form of lime in sufficient quantities to make the soil at least neutral, or better, alkaline. Follow the application of lime by a good harrowing with a spike-toothed harrow.

Grafting Cherries. Can cherry trees be grafted, and if so, when should the cions be taken? Belleville.

Cherries can be grafted. The work is usually done in the early spring, but the cions for the work should be taken in the very late fall or early winter and stored in a cool, damp place. They may, however, be taken very early in the spring before they have started into growth and stored until it is time to do the work. Cleft grafting is done, which consists of taking a cion containing about three buds and planting it into a split made in the small branches.

To Keep Arancurus from Dying. Please tell me how I may prevent the branches of my Norfolk Island pine (Arancurus) from rusting and the leaves from falling. The upper branches are green, but as the plant grows the lower branches rust and fall off. E. L. S.

Are you sure that the plant has been "enough water"? You may have been very conscientious and watered the plant every day, but failed to give it enough to soak the soil clear to the bottom of the pot. If you knock the pot with your knuckles near the bottom, and listen to the sound, you can tell immediately if it has had enough water or not. If it gives a hollow sound, it is dry. If the sound is dead, there is sufficient water in the soil. Should the soil be dry, the best plan will be to set the plant, pot and all, in a pail of water, allowing the water to soak up. Practically the same trouble with the plant would follow overwatering. You can easily tell if this is the case by knocking on the pot. If the soil is full of water, do not water it for several days, allowing the soil to dry out. There are no diseases that seriously affect the Norfolk Island pine.

Corn Insurance. I have been told that tar put on seed corn will prevent the crows from digging it up. If this is so, how is the work done? I. M. C.

A gill of tar to a peck of corn is necessary amount. Stir the corn thoroughly until every kernel is covered with tar. To do it, use some sifted wood ashes or some fine dry soil. The crows will not pull so much of it; it does not taste good. We have used this method successfully.

Cooling Dressed Poultry. Fifth—After the birds are killed and plucked the animal heat must be removed. The best method of doing so is to hang them, head downward, in a room having a temperature between 30 and 35 degrees Fahrenheit, where they should remain for twenty-four hours. The temperature must not go above 35 nor below 29 degrees, and the atmosphere cannot be depended upon to remain within these limits, hence mechanical refrigeration is an absolute necessity. If the packers had been had adhered to this one regulation, it is safe to assert that the inspectors in the markets would have had to hunt a long time for a "green-struck" or "off-conditioned" chicken. Putting the birds in cold

WARNING FOR THE POULTRY SHIPPER

Last Year's Big Losses in Dressed Poultry May Be Avoided, Says Government.

CAREFUL KILLING AND PACK

The fact that it will soon be one year since the calamitous dressed poultry season of 1913 wrecked many hundreds of poultry, sent tens of thousands of pounds of chickens, turkeys, ducks and geese to the crematorium and left the consumer with a string of questions. The taste of the poultry that reached the market in "off" condition that sales have suffered ever since, is being used as the text of the sermon which experts in poultry handling in the United States Department of Agriculture are preaching to meat packers and poultry shippers all over the country.

Shippers agree that the spoilage of dressed poultry during the autumn of 1913 was unparalleled, and that the rest of the year has been, financially, one of the worst on record despite the scarcity of meat. The department considers that the blame rests chiefly upon the man who killed, plucked, chilled and packed the poultry and sent it to market. This man brought the bird alive, hence they were not decayed when he got them. The railroads, in general, have acted diligently at their refrigerating lines, and it is known that shippers who packed their goods properly found the railroad refrigerator cars to be satisfactory to deliver the product in good order. The receivers of poultry were hunting for stock that could be sold to high class trade, and the inspector did not have to look for poultry that was absolutely unfit for food.

The department accompanies its words of warning with words of advice to the poultry dressers, telling them how to handle the birds to ensure high quality and a minimum change in composition.

Advice to Poultry Dressers. First—The packer, as soon as the birds are received, should transfer them to "chilling batteries" which are really coops so constructed that only a few birds are in the same compartment. As the birds are equal chance to get food, each has an abundance of fresh air, and absolute cleanliness is easily maintained.

Second—For twenty-four hours before killing the bird is not fed, but is given plenty of clean water. In this way the crop is emptied and the flavor of the flesh is improved as well as its keeping quality. Of course, the bird does not weigh as much when emptied of food, but it is better to be paid for a few less pounds of poultry than to receive only a freight bill.

Third—Killing should be done by cutting the veins of the neck from inside the mouth while the bird is suspended by the feet. Circular 61 of the Bureau of Chemistry gives the details of how to bleed and "brain"; that is, to loosen the feather muscles so that the birds may be dry-plucked, not scalded. Scalded birds have their keeping quality greatly reduced.

Fourth—Holding the bird while removing the feathers is best accomplished by the "frame" method. The second best way is what is known as the "string" method, and the worst methods are the "bucket" and "lap."

Fifth—After the birds are killed and plucked the animal heat must be removed. The best method of doing so is to hang them, head downward, in a room having a temperature between 30 and 35 degrees Fahrenheit, where they should remain for twenty-four hours. The temperature must not go above 35 nor below 29 degrees, and the atmosphere cannot be depended upon to remain within these limits, hence mechanical refrigeration is an absolute necessity. If the packers had been had adhered to this one regulation, it is safe to assert that the inspectors in the markets would have had to hunt a long time for a "green-struck" or "off-conditioned" chicken. Putting the birds in cold

Noll's Dutch Bulbs for Fall Planting

AS USUAL

Best in Quality—Best in Value—Best in Variety

We have a very large assortment of choice varieties of Hyacinths, Tulips, Crocus, Narcissus, Snowdrops, Spanish and English Iris, etc., which we are offering at attractive prices. The time to plant is NOW. We invite inspection of our stock. Our Autumn Catalogue of Bulbs free for the asking. It is beautifully illustrated and full of practical information.

J. F. Noll & Co., Inc., Seedsmen

(ALEX. FORBES, Pres.)
115 Mulberry Street Newark, N. J.
Phone 4379 Market Free Local Delivery

an. E. C. your first in management Monday! Hanne's!

The greatest purchase ever made by any one store. The result of the deal will be found on

Pages 6 and 7